Wet Microburst Composite Checklist

This is a composite microburst checklist developed for forecasting the potential for wet microburst activity across the Southeast United States. Checklists and operational methods were obtained from five National Weather Service Forecast Offices of Birmingham, Jackson, Mobile, New Orleans, and Shreveport. This composite checklist provides forecasters an ability to check specific parameters considered significant in predicting wet microburst potential for a given day. The bold parameters signify the most frequently used parameters.

Thermodynamics

SBCAPE	**(5/5)**
850mb-500mb T lapse rate	**(4/5)**
PW	**(3/5)**
LI	**(3/5)**

Wet bulb zero height	(2/5)
Cap removal / strength	(2/5)
Dry adiabatic lapse rate from surface	(2/5)
KI	(1/5)
EHI	(1/5)
MDPI	(1/5)
WINDEX	(1/5)
DCAPE	(1/5)
MLLCL	(1/5)
MLCAPE	(1/5)
Theta-e	(1/5)
Freezing level	(1/5)
LCL height	(1/5)
CCL height	(1/5)
LFC height	(1/5)
EL height	(1/5)
Change in equivalent potential temperature	(1/5)
Dewpoint depression 300mb-450mb	(1/5)
Dewpoint depression 700mb-500mb	(1/5)
Moist layer mid T-Td Between 550-800mb	(1/5)
Dry layer above moist layer T-Td > 15C in layer 50-100mb thick	(1/5)
Mixing ratio from surface-700mb	(1/5)
Mixing ratio 1000mb-850mb	(1/5)
Inverted V sounding	(1/5)
Forecasted boundary (sea breeze, outflow, trof)	(1/5)

Kinematics

0-6km weak shear	**(3/5)***
Helicity	(1/5)
BRN	(1/5)
500mb wind direction and speed	(1/5)
700mb-400mb wind speed	(1/5)

*0-6km weak shear is defined as 10-15kts. In some instances 15-20kts may be considered as weak shear.

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